Amendments to the Claims:

Please amend the claims as follows:

Claim 1 (canceled)

Claim 2 (currently amended) A ~~The~~ pedometer ~~as claimed in claim 1,~~ for detecting vibrations in a direction of motion, comprising:

a main body (10);

a printed circuit board (20) incorporating a counting circuit (30) and being installed inside the main body (10);

the counting circuit (30) being formed by a signal amplifier (31), a signal detection circuit (32), and a processor (33);

a vibration detector (11) being installed on the printed circuit board (20) and connected to the counting circuit (30), wherein a sensing pad (110) of the vibration detector (11) is disposed orthogonal to the direction of motion to sense any body vibration in the direction of motion;

wherein the vibration detector (11) comprises a ceramic piezoelectric element; and

a display unit (12) being installed on the printed circuit board (20) and connected to the counting circuit (30) for displaying a pace count value;

where the above vibration detector (11) is disposed orthogonal to the direction of motion and operates in conjunction with the counting circuit (30) on the printed circuit board (20) to detect any body vibration in the direction of motion.

Claim 3 (currently amended) A ~~The~~ pedometer ~~as claimed in claim 1,~~ for detecting vibrations in a direction of motion, comprising:

a main body (10);

a printed circuit board (20) incorporating a counting circuit (30) and being installed inside the main body (10);

the counting circuit (30) being formed by a signal amplifier circuit (31), a signal detection circuit (32), and a processor (33);

a vibration detector (11) being installed on the printed circuit board (20) and connected to the counting circuit (30), wherein a sensing pad (110) of the vibration detector (11) is disposed orthogonal to the direction of motion to sense any body vibration in the direction of motion;

wherein the counting circuit (30) includes:

the ~~a~~ signal amplifier circuit (31) being connected to an output of the vibration detector (11) to obtain a vibration detection ~~an output~~ signal from the vibration detector (11) after proper signal filtering and amplification;

the ~~a~~ signal detection circuit (32) being connected to an output of the signal amplifier circuit (31) to compare the vibration detection signals with a variable reference voltage and then output a pulse signal; and

the ~~a~~ processor (33) being connected to ~~an output of a comparator having variable reference voltage (323) in~~ the signal detection circuit (32) to provide the reference voltage and receive the pulse signal output from the signal detection circuit (32); and

a display unit (12) being installed on the printed circuit board (20) and connected to the counting circuit (30) for displaying a pace count value;

where the above vibration detector (11) is disposed orthogonal to the direction of motion and operates in conjunction with the counting circuit (30) on the printed circuit board (20) to detect any body vibration in the direction of motion.

Claim 4 (currently amended)The pedometer as claimed in claim 3, wherein the signal detection circuit (32) is formed by a low-pass filter (321), a voltage divider (322) and a signal comparator (323) having a negative input and a positive input, wherein the voltage divider (322) and the low-pass filter (321) are ~~both~~ respectively connected to the ~~a~~ negative input and the positive input of the comparator ~~having variable reference voltage~~ (323) ~~(reference voltage terminal)~~.

Claim 5 (currently amended) The pedometer as claimed in claim 4, wherein the ~~reference voltage terminal~~ positive input of the comparator (323) is connected to an output of the processor (33), wherein the processor (33) uses a pulse signal input to control the comparator (323), whereby the processor (33) outputs a signal with a pre-determined duration to reduce noises.

Claim 6 (currently amended) The pedometer as claimed in claim 4 ~~3~~, wherein the voltage divider (322) is formed by two series connected resistors and a grounded capacitor.

Claim 7 (currently amended) The pedometer as claimed in claim 3, wherein the signal amplifier circuit (31) is formed by a filter (311) and a signal amplifier (312), such that ~~the~~

an input of the filter (311) is connected to the vibration detector (11) and ~~the~~ an output is connected to the signal amplifier (312).

Claim 8 (currently amended) The pedometer as claimed in claim 4, wherein the signal amplifier circuit (31) is formed by a filter (311) and a signal amplifier (312), such that ~~the~~ an input of filter (311) is connected to the vibration detector (11) and ~~the~~ an output is connected to the signal amplifier (312).

Claim 9 (currently amended) The pedometer as claimed in claim 5, wherein the signal amplifier circuit (31) is formed by a filter (311) and a signal amplifier (312), such that ~~the~~ an input of filter (311) is connected to the vibration detector (11) and ~~the~~ an output is connected to the signal amplifier (312).

Claim 10 (currently amended) The pedometer as claimed in claim 6, wherein the signal amplifier circuit (31) is formed by a filter (311) and a signal amplifier (312), such that ~~the~~ an input of filter (311) is connected to the vibration detector (11) and ~~the~~ an output is connected to the signal amplifier (312).